

## Reaction of ortho-Phenylenedioxytrihalophosphoranes with Epichlorohydrin

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### Abstract

Dynamic  $^{31}\text{P}$  NMR spectroscopy was applied to investigate the reactions of o-phenylenedioxytrihalophosphoranes and bis(o-phenylenedioxy)halophosphoranes with epichlorohydrin as a function of the reagent ratio.  $\alpha$ -Opening of the epoxide ring predominantly occurs. With excess epichlorohydrin the reaction with o-phenylenedioxytrichlorophosphorane results in formation of pentaalkoxyphosphorane, while in the reaction with o-phenylenedioxytechintribromophosphorane a mixture of phosphate and pentaalkoxyphosphorane is formed.

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